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United States Department of Agriculture

Save the Mountain Yellow-Legged Frog

Federally endangered under the
Endangered Species Act



Forest
Service

Pacific
Southwest
Region

San Bernardino
National Forest

A Species in Decline

The mountain yellow-legged frog (MYLF)—*Rana muscosa*—was historically one of the most common frog species in Southern California. Locally, it was found in virtually every perennial stream in the San Jacinto, San Bernardino and San Gabriel Mountains.

In southern California, MYLF breed between April–July after the high water in streams subsides. Eggs are typically deposited in shallow water and may be attached to undercut banks or vegetation. In streams in rocky canyons, the eggs may be attached to stones on the stream bottom. It takes up to 3 1/2 years for the tadpoles to metamorphose into frogs, and another 3 to 4 years to reach sexual maturity.

These frogs are beneficial to whole aquatic ecosystems. They eat ladybugs, dragonfly nymphs, beetles, flies, ants, bees, wasps, true bugs and they are eaten by snakes and birds.

MYLF have dramatically declined in more than 99% of their previous range. Their decline in Southern California is attributable to a combination of many factors:

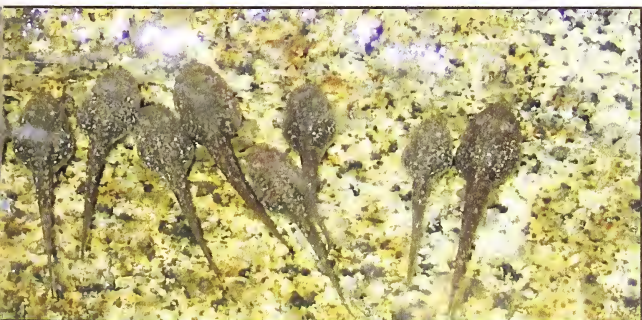
- ▶ Predation by nonnative species like trout and bullfrogs (which eat eggs, tadpoles and juvenile frogs).
- ▶ Habitat loss and degradation from man-made activities.



- ▶ Spread of the Chytrid fungus.
- ▶ Environmental factors like drought, pollution, increases in UV radiation, and certain diseases.
- ▶ Capture and harassment by humans

Many of these factors negatively affect the frogs' ability to reproduce and survive. Unless reduced or stopped, it is very likely that the Mountain Yellow-Legged Frog will continue to decline in Southern California, with the potential for extirpation.

Currently, the MYLF is known to occur in only nine places in portions of the San Gabriel, San Bernardino, and San Jacinto Mountains, all partially on National Forest System lands. The USFS, in cooperation with the US Fish and Wildlife Service, California Dept. Fish and Wildlife, US Geological Survey, San Diego Zoo, Los Angeles Zoo, San Francisco State University, and CA Dept of Transportation (CalTrans) have implemented a successful captive breeding program and have conducted several reintroductions of frogs into creeks in the San Jacinto Mountains.





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Recovery Efforts

As part of a cooperative effort to recover the species, creek closure areas along Fuller Mill Creek and the North Fork of the San Jacinto River were implemented to protect MYLF adults, tadpoles and eggs during the activity season. This area contains one of the few remaining populations in the San Bernardino National Forest.

Dark Canyon Campground happens to be a very popular recreation area on the San Jacinto Ranger District. In order to achieve both objectives, we have used adaptive management to provide protec-



tion to federally listed species, while still providing recreational opportunities.

A closure of 10 feet on either side of several creeks was chosen in order to protect the eggs, tadpoles and the adult frogs while they bask near the water's edge. This allows visitors to walk on trails adjacent to the stream, sit back a short distance, watch and listen to the creek, while also keeping the frogs' most critical area free of the human-caused disturbances that would occur with uncontrolled public access.

Since the closures began in 2005, habitat quality has dramatically improved. By minimizing disturbance during the activity season, the USFS hopes to return the frog population to stable levels and ultimately to recovery.



Save the MYLF From Extinction

The Mountain yellow-legged frog is a species teetering on the edge of extinction, and everything we can do is important for its survival.

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What you can do:

- ▶ **Do not handle frogs or tadpoles.**
- ▶ Do not enter designated creeks during the closure period.
- ▶ Stay 10 feet away from creeks to prevent siltation and bank erosion.
- ▶ Remove trash from areas surrounding creeks.
- ▶ Do not dump anything in creeks.
- ▶ Do not introduce non-native species such as bull frogs.
- ▶ Keep pets out of creek closures areas.
- ▶ Educate others about the creek closure.



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